Atelier : l'innovation par les SI dans l'écosystème

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Organisateurs : Abdelkader Achi, Charlotte Hug, Camille Salinesi, Université Paris 1 Panthéon-Sorbonne

Ouverture : 15h00-15h10 : Introduction et tour de table

Session 1 : 15h10-16h15 : Innovation et financement participatifs

15h10 - 15h35 – *Les outils informatiques, un frein à l'innovation?* Raphaëlle Bour, Chantal Soule-Dupuy, Nathalie Vallès, Jean-Marc Iris, IRIT, Université Toulouse 1, Société COMOE

15h35 - 16h00 – *Crowdfunding as an innovation booster factor and its dependence on Information Systems*, Milosevic Marina, Laboratoire PRISM, Université Paris 1 Panthéon-Sorbonne

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16h15-16h30 : Pause-café

Session 2 : 16h30-18h00 : Vision stratégique et culturelle de l'innovation

16h30 - 16h55 – *Digital Business Innovation*, Gianluigi Viscusi, Ecole Polytechnique Fédérale de Lausanne (EPFL)

16h55 - 17h20 – *Innover, pas sans une culture adéquate*, Karim Hedeoud, Culturibles

17h20 - 18h00 – Discussions

Les outils informatiques, un frein à l'innovation ?

Passer de la co-conception à la co-construction d'outils informatiques

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RESUME. *Les systèmes d'information sont aujourd'hui un véritable moyen de faire émerger des idées innovantes dans l'entreprise mais ils peuvent également représenter un frein à la mise en œuvre de ces idées. Si les démarches de co-conception, d'ingénierie des exigences collaboratives permettent de lever certains de ces freins, une démarche d'innovation durable dans l'entreprise devrait passer par la co-construction d'outils informatiques. Nous proposons ici d'illustrer cette idée avec un retour d'expérience sur une étude de cas concret d'une démarche et d'une plateforme de co-construction d'application.*

ABSTRACT. *Information systems are today a real way to allow innovative ideas to emerge in the business world, but they can also put the brakes on the implementation of those ideas. Even if the co-conception approach and the collaborative requirements engineering are used to lift some constraints, a sustainable innovation approach has to go through the co-construction of IT tools. The purpose of this article is to express this idea with a feedback on a concrete case study of an approach and a co-construction platform.*

MOTS-CLES : *innovation participative, co-conception de systèmes, conception collaborative, démarche de co-construction*

KEYWORDS: *participative innovation, collaborative design, co-construction approach*

1. Introduction

Dans le courant actuel de l'innovation participative, les salariés sont de plus en plus sollicités pour être force de proposition en termes d'innovation dans l'entreprise (Getz et Robinson, 2003). C'est ainsi que les moyens « traditionnels » d'émergence d'idées continuent de se développer : boîtes à idées, cercles de qualité, formations aux techniques de créativité, et que des moyens numériques voient le jour : partenariats entreprises - start-up - laboratoires, plateformes collaboratives dédiées au partage d'idées, enquêtes en ligne.

Le SI peut alors être utilisé comme un outil collaboratif, grâce auquel des idées innovantes voient le jour. Ces idées sont portées par un salarié ou un groupe de salariés dans l'entreprise, et permettent bien souvent de « donner plus de sens au travail », (cf. Etude sur l'innovation participative d'Innov'Acteurs, 2014). Lorsque l'innovation est acceptée, elle vient impacter les processus métier. Et dès lors que l'on passe à la mise en œuvre du projet innovant, les outils informatiques doivent être adaptés (ou créés) pour supporter ces nouveaux processus.

Aujourd'hui, la démarche « classique » de production des outils informatiques peut apparaître comme un frein à l'innovation. Les méthodes de conception collaborative permettent cependant de lever certains de ces freins, c'est ce que nous verrons dans une première partie. Dans une deuxième partie, et à l'appui d'un retour d'expérience, nous verrons comment aller plus loin pour que les porteurs d'idées innovantes ne soient plus seulement les co-concepteurs de leur système d'information, mais aussi les co-constructeurs de celui-ci. Dans une dernière partie, nous verrons les questions que cela soulève.

2. Lever les freins à l'innovation grâce aux méthodes de conception collaborative

La mise en œuvre d'une innovation dans l'entreprise implique généralement une modification des processus et donc des outils informatiques. Deux options peuvent alors être envisagées : lancer un projet SI classique ou laisser les salariés gérer ce nouveau besoin.

Le premier cas implique une contractualisation, qui en elle-même impose rigidité, cloisonnement entre les acteurs du projet et négociations sur les coûts et délais. Ces projets ne poussent pas à une dynamique d'échange, et ne permettent donc que peu de réactivité (Hochereau, 2000). Pour ces raisons objectives, les projets « classiques » représentent un frein à l'innovation, mais également pour deux raisons sous-jacentes : d'une part le salarié ou groupe de salariés ayant fait émerger l'idée innovante est dépossédé de son idée et d'autre part, le salarié n'est pas incité à améliorer la qualité de son projet innovant puisqu'il n'a pas la possibilité d'en modifier les outils supports, sauf à relancer un projet informatique.

Le second cas implique le développement de l'informatique informelle, ou « Shadow IT », dans les services (Rentrop et Zimmermann, 2012). Ce phénomène très répandu dans les entreprises se traduit le plus souvent par le développement

d'outils basés sur Excel (Chejfec, 2012). Cette informatique informelle comme support d'une innovation est problématique : l'outil n'est que rarement partagé, et il est conceptuellement et sémantiquement pauvre ; il ne peut pas s'inscrire dans le temps comme un support durable.

Aujourd'hui, les méthodes de conception collaborative se propagent et permettent de lever certains des freins identifiés précédemment. Parmi ces méthodologies phares qui impliquent les utilisateurs jusque dans les phases de conception des applications informatiques : les méthodes Agile et les méthodes d'ingénierie des exigences collaboratives.

Les méthodologies Agile dans un premier temps, permettent de raccourcir les délais des projets en validant rapidement et régulièrement la capacité de l'outil à répondre aux nouveaux besoins. Elles sont également garantes d'une certaine qualité, en autorisant le droit à l'erreur, et la remise en question de ce qui a été développé, en vue de son amélioration (Schwartz *et al.*, 2009). Les méthodes d'ingénierie des exigences collaboratives et participatives viennent elles aussi lever des freins (Castiaux et Mahaux, 2012), en proposant des outils et des systèmes durables, grâce à la prise en compte des exigences métier. La collaboration entre acteurs « fonctionnels » et acteurs « techniques » d'un projet, notamment grâce à l'utilisation de modèles communs (Dupuy-Chessa *et al.*, 2011) est également un moyen de s'assurer du rapprochement entre l'outil souhaité et l'outil réalisé et offre au salarié qui a proposé une idée innovante une application proche de ce qu'il avait imaginé.

Mais si la co-conception permet de lever des freins à la concrétisation de l'innovation par le SI, elle n'en est pas pour autant suffisante. Dans une volonté de libérer véritablement l'innovation dans l'entreprise, et de donner à chacun l'envie d'être créatif, les agents devraient pouvoir maitriser leur idée, et la garder entre leurs mains depuis l'émergence de cette idée jusqu'à sa mise en œuvre.

3. Libérer l'innovation en passant de la co-conception à la co-construction : un retour d'expérience

L'une des solutions envisagées pour répondre à ce besoin de libérer l'innovation dans l'entreprise est la co-construction d'outils informatiques par les agents eux-mêmes, qui renvoie à des changements importants dans le processus de production informatique. D'une part, la co-construction signifie que les outils informatiques sont compris et construits par les utilisateurs. Pour cela, la représentation cognitive que se font les utilisateurs de leur métier doit être au plus proche de la représentation informatique qui en résulte. D'autre part, les moyens d'interaction entre l'utilisateur et l'application ne doivent pas nécessiter d'apprentissage particulier, au risque de devoir de nouveau confier la construction de l'outil à des experts techniques. De plus, l'outil doit être souple et adaptable, tant au niveau des fonctionnalités proposées qu'au niveau du modèle de données supportant les processus. Enfin, une démarche accompagnant cette co-construction doit être formalisée.

Une expérimentation a pu être menée l'année dernière au sein de la société Comoé (http://www.comoe.fr). Le but de cette expérimentation était d'impliquer des agents de l'entreprise dans l'émergence d'idées innovantes, puis dans la conception des outils informatiques de gestion supports à ces idées, et enfin de voir de quelle manière ces derniers pouvaient participer à la construction de l'outil. C'est autour du service Semantica (http://www.comoe.fr/spip.php?breve58) que s'est axée cette étude d'un cas concret. Ce service est constitué d'une démarche de conception, dont il a fallu évaluer la pertinence, et d'une plateforme de construction applicative par rapport à laquelle des attentes ont été exprimées.

La mise en place de la démarche a consisté en des ateliers participatifs inspirés du formalisme Metaplan (cf. Les « Basics » de Metaplan, 2015), encourageant la créativité, pour faire s'exprimer chacun des salariés ainsi que le directeur de la société. L'atelier de « cadrage » a porté sur la stratégie d'entreprise et a permis à chacun de proposer des idées innovantes, d'être en accord avec les orientations prises et à prendre, et de participer à la mise au point d'objectifs stratégiques. Les ateliers « domaines et processus » ont eu pour but de formaliser les nouveaux processus supports de cette stratégie, et d'établir ainsi une vision commune du domaine métier. Autrement dit, c'est au travers des processus, et avec en ligne de mire les objectifs stratégiques, que le domaine métier cible a été décrit en conservant toujours la sémantique propre à l'entreprise.

La seconde phase de l'expérimentation a consisté en un passage immédiat de cette représentation que les agents se font de leur domaine à l'implantation de ces représentations dans l'application informatique. Pour cela, c'est la plateforme Semantica qui a été utilisée. Celle-ci a permis, grâce à son socle sémantique, et à un ensemble d'outils de représentation regroupés dans un « métamodèle » de description des métiers, d'implanter le modèle en base de données sans formalisme particulier, grâce à l'utilisation du langage naturel (figure 1). Ainsi, la représentation cognitive des agents n'a pas été altérée par une succession de transformations de modèles, et l'implantation physique du domaine a respecté la sémantique de l'entreprise.

1: <Organisation est un concept> 2: <Nom est un descripteur d'organisation> 3 : <Mairie est une sorte d'organisation> 4: <Mission est un concept> 5: <Nom est un descripteur de mission> 6: <Montant est un descripteur de mission> 7: <Client est un descripteur de mission de type collectivité>	<liste des concepts> <concept> <nom>Organisation</nom> </concept> <concept><nom>Mission</nom></concept> </liste des concepts> <liste des descripteurs> <descripteur> <nomconcept>Organisation</nomconcept> <libelle>nom</libelle> </descripteur> … </liste des descripteurs>

Figure 1. Description du domaine en langage naturel par l'utilisateur avec sa traduction XML pour l'implantation en base de données

La troisième phase de l'expérimentation a consisté en un atelier « outils ». La première partie de l'atelier a été une validation du domaine directement sur l'outil informatique grâce à l'interrogation en langage naturel. Chacun des agents a alors pu interroger l'application, par exemple de cette manière : « quels sont les clients ? », « quels sont les missions dont le client est XXX ? » afin de vérifier la bonne concordance entre le domaine décrit lors des ateliers processus, et son implantation dans l'outil. L'atelier s'est poursuivi avec la description des besoins en termes d'ergonomie, de fonctionnalités. Pour cette étape, le choix s'est porté sur l'utilisation d'une partie de la méthodologie SCRUM, avec l'écriture de user stories, réalisées ensuite par le développeur. Chaque itération a ainsi pu être validée par les utilisateurs.

Aujourd'hui le constat est clair : les utilisateurs sont satisfaits de la démarche, qui leur a permis de ne jamais altérer la représentation cognitive qu'ils ont de leur métier, de leurs procédures de travail, via les phases de co-conception du logiciel. Cependant, cette plateforme si elle permet une interrogation en langage naturel et une création de la base de données par ce même biais, reste une construction de « technicien » développeur. Pourquoi alors ne pas aller plus loin, en confiant aux agents la construction à proprement parler de leur outil, et donc naturellement par la suite la gestion des évolutions et de la maintenance ?

4. Questions ouvertes

Cette proposition de co-construction d'outils informatiques est envisageable avec Semantica, et semble répondre au besoin d'une démarche d'innovation construite durablement, pour devenir un véritable atout pour l'entreprise (Georgsdottir et Getz, 2004). Elle s'inscrit à priori dans un contexte d'entreprise libérée, où les agents ont l'autonomie et la confiance suffisante pour innover, et mettre en place leur innovation.

Mais cette co-construction soulève de nombreuses questions. Dans un premier temps, la manipulation par les agents eux-mêmes de la base de données pose le problème de la représentation informatique du métier, qui se doit d'être proche, voire identique, à la représentation cognitive qu'en ont les agents. Mais alors le métamodèle de Semantica répond-il à cette attente ? Chacun doit-il se conformer en tous points à la représentation cognitive de son voisin ? Et alors le métamodèle devrait-il permettre de partager/fusionner des représentations cognitives différentes ?

Enfin, cette co-construction ne peut se faire de manière totalement anarchique, et une organisation doit être mise en place en interne pour faire évoluer l'outil. Mais alors chaque agent prend-il la liberté d'agir seul ? Ou se tourne-t-il vers un référent unique par service ? Quelle démarche adopter ?

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Crowdfunding as an innovation booster factor and its dependance on Information Systems

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ABSTRACT : The purpose of this article is to show how innovation has affected the world of finance, more precisely the appearance of crowdfunding as an alternative investment solution, to outline the importance of the role of information systems for its functioning, but equally so, put an accent on the dependence of the exercise of crowdfunding on the digital world. In 2014, the overall amount of funds collected throughout crowdfunding platforms equals 16.2 billion dollars and has experienced a 167% increase with regards to the results realized in 2013 (6.1 billion dollars), which already shows proof of sharp growth and highly increased interest in crowdfunding activity. Business and entrepreneurship sector has shown as the most relevant one since it provided for 40% of the overall amount of funds collected throughout 2014. Web 2.0 and therefore co-creation and co-collaboration are the basic notions in crowdfunding since the internet and interconnection of crowdfunding participants, that is, investors, or so called "the crowd", and project creators is at the core of crowdfunding activity.

KEYWORDS: crowdfunding, open innovation, Web 2.0, crowdsourcing, startup, PME, co-creation, Social media, alternative investment, equity

1. Introduction

Entrepreneurs all over the world are in a constant search for new projects, ventures, ideas, and what always seems to be the inevitable part in making such businesses successful is for sure the possibility of finding the available funding. There are various funding possibilities that are at disposal for each entrepreneur, such as traditional ways of funding as venture capital, business loans, angel investors or grants of various kinds, however not all businesses can turn to this type of funding as a potential solution. This is especially the case for SMEs (Small and medium enterprises) and start-up companies looking for initial capital investment to fund

early stages of business, due to different administrative constraints imposed by financial intermediaries, such as banks, and the general funding non-availability or strict selection process on the financial market in the years subsequent to the crisis. This is the point where crowdfunding enters the scene. The possibility of financing small entrepreneurial projects without the interference of any financial intermediary institution. It serves as a way of gathering/drawing the funds needed for new projects involved in for-profit or non-profit, artistic, cultural areas of business, as well as small and medium start-up companies whose founders search for contributions specifically from the internet mass (so-called "the crowd", that is, the people using the internet willing to invest various amounts in a certain project and in this way contribute to its development), without including financial intermediaries. It is a concept rather dependable on the presence and dynamics of social networking, since this is the engine of the whole process. It has developed form the notion of crowdsourcing (Howe, 2006), where the company, via an "open call", outsources an activity previously performed by an ordinary employee to the online crowd. It is a means of outperforming a traditional market industry at a lower cost and much more efficiently, since "collective intelligence" according to Lévy (1994), (Levy, 1994) and equally "the Wisdom of Crowds" according to Surowiecki (2013) (Surowiecki, 2013), are the terms used to show the power of collective thinking, which is often much more efficient than a single mind. Up to today, there is no academic definition of crowdfunding, however, AMF and ACP (AMF (Authorité des marches financières); ACP (Authorité de contrôle prudentiel), 2013), in their crowdfunding guide state that it represents a mechanism to raise funds from a wide audience, more precisely the internet users, in order to fund a creative or an entrepreneurial project/start up/SME, as a support for a local initiative or projects defending certain values, usually followed by a strong emotional dimension. Crowdfunding can be described as a way of gathering the creativity of the mass and the available mass capital in order to create new businesses and in this way boost the productivity of economic society. The success of the business started in this way depends exclusively on the willingness of the "crowd" to invest in such a project/idea in return for a certain compensation, be it a financial based one (equity based/investing in return for a monetary/ownership pay off) or an experience based one (non-monetary, reward/donation based - a sort of social identification with the content that is being funded, in return for some form of reward - recognition, pre-sales future product, tangible promotional material,…) (Belleflamme, Lambert., & Schwienbacher, 2011). Over the last few years, it has shown very important results, and has insured its presence both in professional but as well in the scientific world, since more and more researchers are working on developing an academic view of crowdfunding and confirming its more than valuable impact on the economic society. In 2014, the overall amount of funds collected throughout crowdfunding platforms equaled 16.2 billion dollars and has experienced a 167% increase with regards to the results realized in 2013 (6.1 billion dollars), which already shows proof of sharp growth and highly increased interest in crowdfunding activity. Business and entrepreneurship sector has shown as the most relevant one since it provided for 40% of the overall amount of funds collected throughout 2014. In France, which has established in 2014 a regulatory crowdfunding framework, the

number of platforms has significantly increased, since 30% of all projects put online since 2008 have been put during 2014, as is stated by financeparticipative.org. The amount of funds collected has almost doubled with respect to 2013, and is now equaling 152 million dollars. France is being preparing itself to be nominated the "start up République de l'Europe" (Moscovici & Pellerin, 2014). Horizon 2020 is also including projects financed by crowdfunding, and are especially eager to support equity and lending-based crowdfunding, since the funds gathered are much more relevant and can have an important impact in financing SMEs and various projects supporting sustainable development.

2. The impact of the digital world on the development and growth of crowdfunding

2.1 "The Online Crowds"

Since its introduction to the world in 1990's, Internet has become a globalized business, communication and information collection tool which has turned the business world upside down in a rather short period of time. The e-world communication and collaboration have become the principal drivers for e-business models, such as C2C (consumer to consumer) and P2P (peer to peer) business models, which are the core concepts for the development of both crowdsourcing and crowdfunding activities, while their main functioning feature is an all-user content management. This new concept of using the internet to perform a variety of activities, ranging from doing business (e-commerce), to acquiring education (e-learning) to just exchanging fun content between friends was summarized by Russ (2007), (Russ, 2007) as "the power of online crowds". This new internet dynamics has given boost to the introduction of the user (customer) in a value creating process, allowing him to co-create the business. The so called "Online crowds" make it possible to boost sales, gain much more consumer insight, and in this way create value for the company by pilling up its collective knowledge and desires.

2.2 "The Working Customer"

Corporate –consumer relations have experienced a rather revolutionary change throughout the last couple of decades. From a simple model of doing business, where producers produce and customers buy, there are numerous changes that have taken place and revolutionized the producer-consumer relationship. The services that have traditionally been assigned to a paid employee, are nowadays substituted with a phenomenon introduced by Voss and Reider (2005), (Reider & Voss, 2005) and characterized as a "working customer" phenomenon. More into detail, this type of customer is therefore not an employee who is paid for providing certain services. It is an ordinary customer who is systematically involved in company's production cycle and therefore creates an added value, since he is still doing his regular job besides this role of a "working customer". In some way, company is informally outsourcing its activities to its customers. With the introduction of the internet and Web 2.0 platforms, this corporate-customer relationship changed even more

substantially. Prahalad and Ramaswamy (2004), (Prahalad & Ramaswamy, 2004), evoke the concept of co-creation between the firm and its consumers, with the aim of providing a unique experience for the customer and in this way creating value for both the customer and the company, while boosting the performance and growth of the firm, due to an enormous inflow of newly available market insight. In this way the traditional frame of company functioning, which showed no customer involvement in production circles, has experienced a great change. This kind of revolutionary change in company's managing cycles is induced by the changes in consumer behaviour. With the introduction of the internet, the consumer has become more globally connected, more informed and therefore more active. It has allowed consumers to have much more detailed insight into companies' performance, prices, global presence and customer relations. Therefore, through community networking, customers have successfully exchanged knowledge and experiences on the products and in this way developed a way to influence company's product-related decisions. Consumer interaction has led to the situation where they know what they want, know what to expect, are very well informed, and therefore oblige the company to follow their demands and let them be a part of value creation. In this way, also, the traditional top-down managing structure has been changed, and mixed with the bottom-up one, where customers have more rights and influences. Now, not only it is important for companies to concentrate on delivering a quality product, but also on delivering a quality co-creation experience. The authors propose a DART model where all sides of production (company, suppliers, employees and consumers) can benefit from. It includes four components: dialogue, access, risk assessment and transparency. Customers become co-creators, companies have more insight into consumers' wishes making them more innovative and prepared to satisfy their need by offering them what they asked for, while employees make more effort to please individual consumers, by developing personalized product offers, but also by developing new business models. In this way, costs can be reduced as well as related-risk issues, such as information asymmetry, can be mitigated. In this way, co-creation experience has been enabled to reach new levels (Prahalad & Ramaswamy, 2004)

2.3 Web 2.0

The feature that has made it all possible is the appearance of Web 2.0 platforms, that is, the connection between software developers and the end users on the internet (Kaplan & Haenlein, 2010). The passage form individually managed Web 1.0 platforms to a collaborative, innovative Web 2.0, where users are welcome to interfere and add value by introducing their own ideas and opinions. Including certain technological advances with respect to Web 1.0 platforms, Web 2.0 is actually a ticket for anyone who wants to operate on the internet to create a certain content and make it available online. This provides for an enormous amount of easily accessible information and knowledge available online to be combined and interchanged between users, who are, in this way, more than ever motivated to innovate and create additional value. In this way networks of online users are created, allowing them to connect and exchange on common interests. Companies

benefit also since reaching potential customers has never been easier (Kaplan & Haenlein, 2010) (Schweinbacher & Larralde, 2010). Therefore, Web 2.0, is an indispensable feature for the appearance of social technologies, or more precisely, social networks, and consequently, appears as a core concept and functionality feature inevitable for the rise of crowdsourcing and crowdfunding.

2.4 Social media

The coupling trend of web and social technologies, including also the vast expansion of blog community available online, just highlights the revolution of the online world, pushing it more and more towards the user-generated content, enabling the exchange of opinions and ideas, creation and information sharing, and most importantly possibility of interaction (Smith, 2009) (Saxton & Wang, 2011). Until this moment, there was no possibility for a company to obtain feedback information and also there was no such interest expressed by companies. However, today, in this consumer-depending business world, companies need to invest themselves into, and allow for communication with their customers, listen and review their feedback and sustain a relationship with them, since their influence is rather important for the presentation of the business, since there is no better commercial for the company than its customer feedback and therefore, an online word of mouth. Social technologies have also introduced more transparency, developed wider global focus and have provided for an overall sentiment of community belonging. Each consumer willing to leave a comment/opinion on a certain product has for sure found a certain personal identification within it and therefore feels a need to contribute by just stating its impressions or even proposing certain improvements to the product. In this way, companies benefit in various ways, from gathering a research-survey-like consumer market data, to product development ideas. We are not even aware of the influence of social technologies on our decision making process. For example, when typing a name of the product in a search engine, the majority of results are opinion-based websites gathering user experiences with the product and their overall ratings and opinions. Therefore, based on this consumer provided information, we form opinions. Also, social networks gather millions of comments on product performance and a social network user is exposed to this influence even without his own will. Lastly, there is even no need to be a social network user, or even a user present online, since today, traditional media such as newspaper, radio and television include social media into their reporting, by outlining the actualities from the web to the offline crowd (Smith, 2009). Therefore, the entrepreneurial benefit from social technologies is rather important, due to the fact that it not only provides for lower business strategy implementation costs, but it enables both B2B (business to business) and B2C (business to consumer) systems to perform at its best, fortifying company's consumer network by attracting new customers.

Overall, Internet has made place for communication and collaboration between the sell side and the buy side of the marketplace. It has provided possibilities for entrepreneurs to reach their customers much more efficiently and has enabled them to employ their creativity and launch their business ideas. Today, there are 3.1

billion internet users worldwide, and therefore what we can conclude is that the internet and the appearance of Web 2.0 is an indispensable feature of crowdsourcing and therefore crowdfunding, due to its ability to gather creativity, innovation, knowledge and in this way foster value creation for entrepreneurs worldwide.

3. Social and economic impact of Crowdfunding

The financial world today is giving a lot of new opportunities to creative and innovative people eager to start their own business and in this way finance their future, along with providing new possibilities for its supporters, as in the case of crowdfunding. There are novelties in financial world and new improved ways for managing capital. Moreover, the possibility of obtaining loans for funding small businesses is a rather fast growing market and also improving at a large scale. Small loans are more and more available, and there are certain non-traditional financial intermediaries that offer more possibilities at a much lower constraint level, making it easier for the borrower to obtain the loan. According to the European Commission, there are approximately 23million SMEs (Buysere, Gajda, Kleverlaan, & Marom, 2012) in Europe, which provide for around 80% of new jobs created, which actually shows the high importance of their existence and their impact on the overall European economic situation. Therefore, the fact that out of these 23million SMEs, around 10 million (Buysere, Gajda, Kleverlaan, & Marom, 2012) gather and sustain their capital through private connections, that is, families and friends, just shows the inability and difficulties imposed by today's economy to obtain bank loans and finance its business through traditional ways of financing. The most important fact in this discussion is that SMEs are the type of enterprises who have been the most impacted type of business by the crises, and therefore are the most critical category which needs high inflow of capital in order to provide its services and benefit the economy. Therefore, the importance of crowdfunding emerges at this point, asking for even more accessibility and formalization through establishing regulation policies, such as it has been done in France in 2014, and providing for a more official presence in financial services sector. European crowdfunding market is the third largest, just after North America and Asia, and in 2014 it has raised $3.26 billion dollars, according to Massolution.com. Therefore, these funds have already offered a lot to the improvement of European economy, providing for capital access, product innovation, employment, cultural variety and have therefore contributed to the overall economic growth (Buysere, Gajda, Kleverlaan, & Marom, 2012). It shows not only for financial benefits, but also for the overall establishment of the product market, since it provides feedback from the customers (the crowd), making it much easier for the entrepreneur to optimize its prices, improve features of the product in question, gain better insight in market segmentation and demand, and get a kind of free marketing due to the "word of mouth" concept. Therefore, it is the only type of financing form that offers these benefits for no additional cost added. In terms of capital allocation, in the world today, the financial market is rather concentrated, due to the fact that there are only a few organizations who are in charge, and being the dominant ones, have the power in allocating capital. Therefore, the role of crowdfunding is again very important since it gives

opportunity to build a market where market share can be more equally divided and in this way contribute to market diversification. This can benefit the establishment of non-manipulated interest rates, much more acceptable and logically more appealing, and therefore provide an optimized return and in this way make room for financial stability. Also, crowdfunding makes place for decreasing the funding risk, since fund raisers benefit from funds gathered from different types of investors, individual ones as well as corporate ones. Finally, crowdfunding can also have impact on government investments, since it could provide for much higher visibility for actual funding needs in the economy, and in this way it could help fund those areas and industries who are in a real need of funding. What should not be forgotten is the high growth of e-commerce industry, due to the increase of "the crowd", wide internet access and the introduction of safe internet payment. E-commerce, at this point is a multibillion industry and with the further development of crowdfunding it does not seem as its growth is going to slow down (Fink, 2012). Therefore, even though capital availability in traditional financing circles is not at its peak, there are plenty other ways of financing that have shown a significant growth and are expected to become even more important sources of capital allocation in the future, who are on the way to increase public awareness of the need for innovation and creativity, which could just further boost the economic development.

4. Conclusion

Crowdfunding market is in the peak of development since the number of creative ideas grows from day to day, connecting creators to web platforms who are developing at an equally rapid rate. Moreover, the market specializes in specific fields, through launching niche platforms, in this way connecting people with similar interests and willingness to create or support creation in one powerful place, letting their collective intelligence show its maximum potential. Equity crowdfunding has reached a central spot in all crowdfunding discussions. Regarded as an alternative for early stage start-up financing it mitigates the arising investment risks related to high-risk nature of start-up, and determines crowdfunding's role in the future, replacing venture capital and angel investors in these early stages of investment and in this way allowing each creative mind to launch his idea and wait for its market validation. In this way, the start-up concept and market demand is established, as well as a certain amount of positive cash flow allowing the development of future life stages. All in all, the crowdfunding activity has an enormous potential for boosting social and economic growth, since it shows to be an engine for job creation and development worldwide.

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Digital Business Innovation

Roadmaps and Attitudes

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ABSTRACT. The paper investigates the potential axes and dimensions of roadmaps for digital business innovation for entrepreneurs as well as enterprises. Actually, digital business innovation requires a change of perspective with regard to IT governance and management of IT infrastructure. This is due to the need to adapt them to the constant evolution and changes in business models, consequent to the digitalization of company products and services. Also, the paper considers the business models fitting the diverse roadmaps showing their mapping to a company value chain. Finally, the paper discusses the characteristics of four key types of digital business organization ñattitudesò, resulting from their orientation towards execution or else differentiation.

The paper is based on insights and results from the FutureEnterprise project, which aims to deliver a research roadmap on new forms of internet-based enterprise innovation. The focus of the project is on what are defined there as ñenterprises of the futureò, that are driven by constant business model transformation and innovation, acting as multi-sided platforms built on - as well as emerging from - digital innovations at the global as well as local level to produce shared value including that beyond monetization.

KEYWORDS: digital business innovation, digitalization, business models, roadmaps

1. Introduction

The paper investigates the potential axes and dimensions of roadmaps for digital business innovation for entrepreneurs as well as enterprises. Actually, digital business innovation requires a change of perspective with regard to IT governance and management of IT infrastructure. This is due to the need to adapt them to the constant evolution and changes in business models, consequent to the *digitalization* of a company products and services (Tilson, Lyytinen, & Sørensen, 2010; Yoo, 2013). Also, the paper considers the business models fitting the diverse roadmaps showing their mapping to a company value chain. Finally, the paper discusses the characteristics of four key types of digital business organization ñattitudesò, resulting from their orientation towards execution or else differentiation.

The paper is based on insights and results from the author contributions to the FutureEnterprise project, in particular to Alvertis et al., (2014) and Cave & Cave, (2015). The project aims to deliver a research roadmap on new forms of internet-based enterprise innovation. The focus of the project is on what are defined there as ñenterprises of the futureò, that are driven by constant business model transformation and innovation, acting as multi-sided platforms built on - as well as emerging from - digital innovations at the global as well as local level to produce shared value including that beyond monetization.

The paper is structured as follows first we discuss the potential alternative roadmaps identified for enterprises and entrepreneurs willing to adopt business models enforcing digital business innovation. Then, mapping is provided of a set business model innovations for the identified roadmaps on the value chain primary and support activities. Finally, types of organization configurations are presented suitable to support companies understanding of their actual « attitude » towards digital business innovation. Conclusive remarks and future work end the paper.

2. Roadmaps

In this Section we discuss a framework for identifying the roadmaps that diverse business actors (entrepreneurs, small and medium enterprises- SMEs, and large enterprise) follow when undertaking specific evolution paths. These paths are driven by the business models innovation (BMI) the actors may chose, in terms of design or reconfiguration (Massa & Tucci, 2014), on the basis of their strategic orientation

towards differentiation[1] and/o the focus of the diverse actors on execution or operational effectiveness[2].

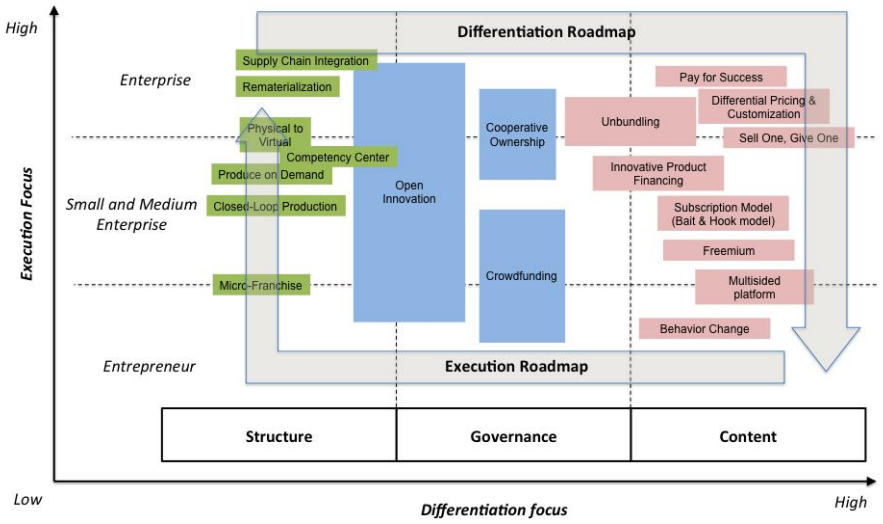

Figure 1: Exploration framework for Business Models Innovation Roadmapping, adapted from Alvertis et al. (2014).

Thus, the framework is also based on a classification of available business models (BMs) in terms of their design core elements and the types of business actors suitable to adopt them. The design core elements refer to an activity systems perspective on business models (Amit & Zott, 2012; Zott & Amit, 2010), where activity system design describes how firms do business, and captures the essence of the business model. In particular according to Amit & Zott, (2012), *activity system content* refers to the selection of activities, that are performed. *Activity system*

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[1] *Differentiation* refers to the creation of something (product or service) either unique (or perceived unique) in a given market or «brand new», thus, leading to the creation of a new industry or market. Differentiation may also refer to a price advantage due to the capability of a company offering to increase the customersô willingness to pay (Porter, 1985). Thus, in our framework the content element is characterized by the highest degree of differentiation, due to its direct influence on the components of an offering.

[2] *Execution* refers to the ability of a business actor to perform its core activities better than the competitors or else obtaining more out of its own resources (Porter, 1985), e.g., in terms of efficiency, cost leadership, etc. Consequently, the framework sees execution more focused on business processes and infrastructure management in established enterprises (being them large or small and medium sized).

structure describes how the activities are linked as well as their relevance to the business model (being them core, supporting or peripheral). Finally, *activity system governance* refers to who performs the activities and its role in decision-making or gatekeeping.

The framework is shown in Figure 1. A green color is associated to BMs having structure as design core element, a sky-blue one to the BMs having governance as design core element, and a rose color to the ones having content as design core element. Then the diverse design core elements are further characterized on the basis of their strategic orientation towards differentiation and the consequent strategic focus. Whereas the considered business actors are positioned on the basis of their focus on execution or operational effectiveness. Finally, the identified BMs are distributed on the resulting roadmap (see again Figure 1) on the quadrants at the crossroad between the associated design element degrees of differentiation and the business actor execution focus.

It is worth noting that some BMs can cover areas pertaining to diverse core elements and actors than the ones primarily characterizing it (in Figure 1 this issue is represented by the thickness and extension of the different BMs colored boxes, such as, e.g., in the case of the «open innovation» BM). This creates two different roadmaps for the diverse business actors: one leading to higher level of execution and the other to a differentiation leadership. The idea is that (large) enterprises, SMEs, and entrepreneurs have to move in the roadmap focus through the key elements (e.g., entrepreneurs may focus mainly on content, SMEs start from structure to arrive at content, enterprise may start with governance to arrive at content). Thus, supposing that entrepreneurs are initially more interested into differentiation rather than to execution, however, once reached the higher level of it, probably they will have evolved towards being a SMEs or else even a (large) enterprise, consequently moving along the steps of the execution roadmap. The opposite path can be supposed to be the one followed by (large) enterprises and SMEs.

3. Digital Business Impact on the value chain

In this Section we provide a mapping of a set of BMIs identified for the roadmaps discussed above on the value chain primary activities (product and market related activities) and support activities (related to infrastructure, technology, procurement, and human resource management). For the full description of the BMIs we refer the reader to Alvertis et al. (2014) and other sources as, e.g., Afuah & Tucci, 2003; Chesbrough, 2003; Osterwalder & Pigneur, 2010. As to the mapping shown in Figure 2a and Figure 2b, we propose a sequence of adoption of the different business models by a generic enterprise willing to approach digital business innovation.

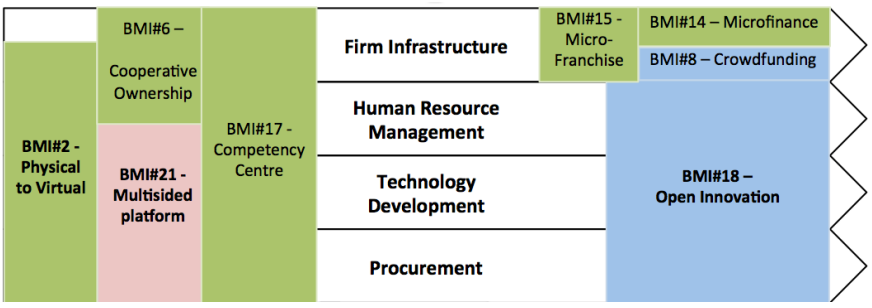

Figure 2a. Business Model Innovations impact on value chain support activities.

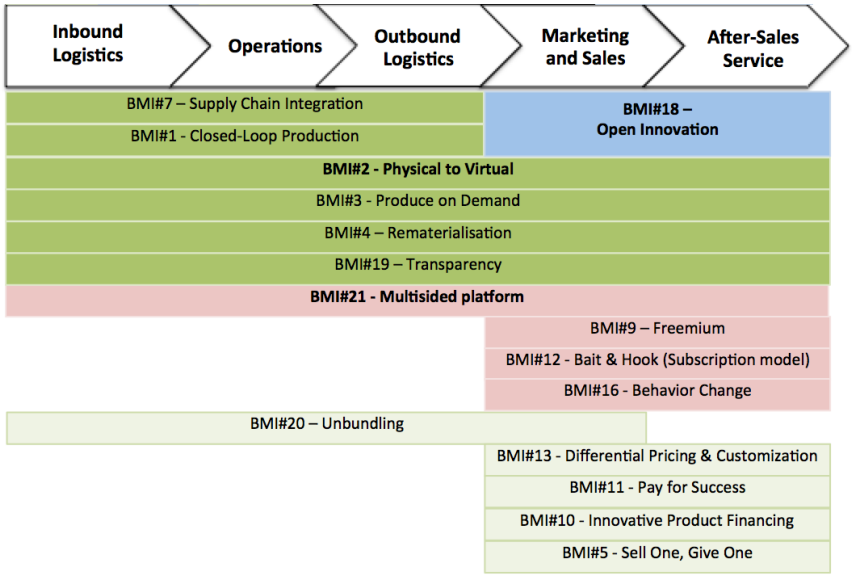

Figure 2b. Business Model Innovations Impact on value chain primary activities

Considering the support activities (Figure 2a), the adoption of BMIs such as, e.g., *BMI#2 - Physical to Virtual* and *BMI#17 - Competency Centre*, allows an integrate organizational change of all of the support activities, namely firm infrastructure, human resource management, technology development, and procurement. The change in this case is oriented towards execution. Combining these actions with a focused change on firm infrastructure through, e.g., *BMI#15 - Micro-Franchise*, the enterprise is able to start experimenting on *BMI#21 Multisided platform* and *BMI#18 - Open Innovation.* It is worth noting that BMIs shown in bold letter in Figure 2a and Figure 2b impact primary activities as well.

As to the primary activities (Figure 2b), the execution oriented BMIs, above considered for support activities, have their execution complements here represented, e.g., by *BMI#7 ï Supply Chain Integration* (covering logistics and operations), *BMI#2 ï Physical to Virtual* and *BMI#3 ï Produce on Demand*. The adoption of the latter BMIs is a relevant when not a mandatory basis for further adoption of differentiation oriented BMIs.

4. Attitudes

This Section outlines the types of organization configurations a business actor may have or adopt when looking to take advantage of the diverse BMIs associated to the above-discussed roadmaps. Thus, adopting BMIs associated to a certain roadmap may lead businesses to follow different trajectories and having a specific attitude toward digital business innovation, either focused on execution or differentiation and all the hybrid configurations in between. However, to better elicit the changes in the organizational structure to take advantage of the diverse BMIs and roadmaps a further set of dimensions have to be considered as to the *response patterns stability* and *consistency* (Miles & Snow, 1978|2003).

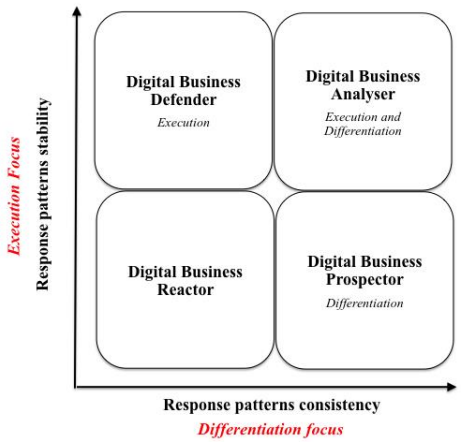

Figure 3. Types of Digital Business organization configurations and attitudes. Adapted from Cave & Cave (2015).

Hence, for each of the considered business actors, the combination of the BMIs roadmap strategic orientation (differentiation vs. execution) and the response patterns (degree of stability and consistency characterizing them) allow to identify four types of digital business organization configurations. Figure 3 shows the four types based on an adaptation to digital business challenges of the classic Miles & Snow (1978|2003) typology (made up of *defenders*, *prospectors*, *analyzers*, and *reactors*). However, it is worth noting that the description of the types characteristics

preserves the core facets of the original typology (see Miles & Snow 1978|2003). Thus, we summarize them in what follows:

- *Digital Business Defender* is an organization focused on being competitive in a narrow and well-defined (product-service)-market in digital business, thus, mainly giving attention to efficiency, productivity, and improvement of existing operations.
- *Digital Business Prospector* is an organization focused on continuous differentiation and innovation of service-products, and constantly looking for new digital market opportunities, giving a primary attention to experimentation.
- *Digital Business Analyzer* is an organization operating in two markets, i) one stable and with a limited degree of digitalization, ii) the other highly digitalized and evolving or being subject to change. In the first market the organization operates as the defender does, while in the second it acts as a prospector does.
- *Digital Business Reactor* is an organization unable to respond effectively to change and uncertainty in the business environment, due to inadequately articulated strategy or an organizational structure improperly linked to strategy or the adherence to an obsolete strategy and structure.

Considering the response patterns axes in Figure 3, it is worth noting that according to Miles & Snow (1978|2003), reactors response mechanisms are unstable and inconsistent[3]. Thus, organizations in that quadrant have to move to one of the other three types in order to exploit the BMIs suitable to enable them taking advantage of digital business in an execution or else differentiation oriented strategy. However, it should also be noted that, due to the high variability and velocity of change driven by digital technologies, becoming a digital business reactor could be the case also for organizations having chosen or adopted one of the three stable and consistent response types, for they embraced digital technologies become obsolete.

In what follows the former types are discussed as ñattitudesò for the target business actors, highlighting the specific issues they encompass as for four «universal» problems of organizing: *task division*, *task allocation*, *reward provision*, and *information provision* (Puranam, Alexy, & Reitzig, 2014). Finally, it is worth noting that the subsequent description of types follows and adapts the original proposal by Miles & Snow (1998|2003).

Digital Business Defender (DBD) organizations usually are oriented towards execution as cost efficiency and penetration in their current markets. Thus, planning is actually a relevant activity to develop and carry out digital business initiatives, then evaluated and eventually revised. As for task allocation, DBDs adopts a

[3] With regard to the original Miles & Snow typology, we have proposed here to consider different degrees of instability and inconsistency.

functional organizational structure, with high degree of formalization and division of labor. The efficiency orientation influences the reward provision as well as human resources allocation (focus on cost-control areas and operations). As for information provision DBDs adopt ñlong-loopedò vertical information systems and simple forms of coordination (standardization and scheduling). The main risk faced by DBDs in the current digital business environment is actually the failure to detect new service/products opportunities.

Digital Business Prospector (DBP) organizations are oriented towards differentiation through innovation and market responsiveness. The DBP type is constantly ready to alter its organizational structure to accelerate responses to environmental change. DBP is suitable to be adopted by tech start-ups and tech driven enterprises focused on digital business innovation. Thus, testing, prototyping as well trends scouting and ideation are preliminary activities to develop and carry out digital business initiatives, then evaluated and only as a final step formally planned. Planning is actually problem solving and findings oriented, heavily dependent on experimental and testing feedbacks (see also Miles & Snow, 1998|2003).

As for task allocation, DBPs adopt a decentralized organizational structure, relying on self-control and information located at the diverse units. Indeed, DBPs localize the resources to project teams to develop a new product and services or explore a niche market. Consequently, DBPs have a less division of labor and tasks with a low degree of formalization, due to constant and frequent changes of the tasks to perform. Also, rewards are results-oriented with a great part of intangibles as the recognition by community peers (as, e.g., in open source domains). As for information provision, DBPs adopt short horizontal feedback loops information systems and complex forms of coordination based on digital platforms driven communication, coordination, cooperation, and networking. The main risk faced by DBPs is related to their failure orientation, that is, investments may not provide the expected results and they may have overload of resources.

Digital Business Analyser (DBA) organizations have a double orientation either towards execution on their main market and differentiation as innovation and market responsiveness. As said above, in the first market they operate as the DBD does, while in the second they act rather than a DBP. Thus, they have a matrix organizational structure, made up, on the one hand, of functional budget oriented divisions for the stable business; on the other hand, they rely on self-contained projects as well as results oriented groups for the research and development of innovative solutions. Consequently, as to information provision, the DBAs adopt both simple and complex forms of coordination, combining ñlong-loopedò vertical information systems and short horizontal feedback loops). The DBA attitude is suitable to be adopted by large enterprises and SMEs.

5. Conclusion and future work

The paper has discussed the potential axes and dimensions of roadmaps for digital business innovation for entrepreneurs as well as enterprises, also providing a mapping on value chain of some relevant BMIs for the diverse strategic orientations identified for the roadmaps (execution vs. differentiation). Then, we have discussed types of organization configurations a business actor may have or adopt as ñattitudesò when looking to take advantage of the diverse BMIs associated to the above-discussed roadmaps strategic orientation. The roadmaps and types presented in this paper are based on the analysis of secondary sources and case studies from practitionersô reports and documents as well as academic literature. In future work empirical research is going to be developed on real cases for the business actors engaged in digital business innovation, to ground the proposals presented in this paper on empirical evidence and make them evolve according to the results.

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Biography

Gianluigi Viscusi (PhD) is research fellow at the Chair of Corporate Strategy and Innovation (CSI) of the EPFL. His research interests include information systems planning and business modelling, public policy and technology Innovation, e-Government, information quality and value, service management and engineering, social study of information systems. He has been consultant on e-government planning, policy design, and implementation roadmap for international organizations such as, e.g., the OECD. Currently, his research focuses on three main streams: crowd-driven innovation, social value of open government, and translational research in innovation and technology management. His research has been published in a range of books, conference proceedings, and journals such as, e.g., Government Information Quarterly. In 2010 he has co-authored with Carlo Batini and Massimo Mecella the book ñInformation Systems for eGovernment: a quality of service perspectiveò (Springer, Heidelberg).

Innover, pas sans une culture adéquate

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RÉSUMÉ : Les entreprises en réponse aux évolutions de leurs écosystèmes se dotent de capacités d'innovation, en utilisant le système d'information comme un levier fort, mais négligent un autre levier important qu'est la culture d'entreprise qui pourtant fait émerger la cohésion sociale, élément fondamental pour survivre dans un environnement complexe changeant et incertain.

MOTS-CLÉS : Innovation, culture d'entreprise, fondamentaux culturels, comportements, interdits et obligations

1. Introduction

Confrontées à un environnement concurrentiel de plus en plus turbulent, et à une conjoncture toujours plus difficile, les entreprises doivent à la fois faire des économies et dégager de nouvelles sources de revenus. Une stratégie duale, entre maitrise des couts et innovation, qui passe par l'évolution des systèmes d'information vers plus d'efficience et d'agilité au service des métiers. Il faut en conséquence mobiliser les mêmes services et les mêmes personnes autour d'une stratégie à la fois d'exploitation optimisée (stabilité/ordre) et de rupture (évolution/désordre) qu'il ne suffit pas de juxtaposer mais bien d'articuler pour créer de la valeur et la concrétiser en richesse.

Mais les entreprises opèrent dans un écosystème complexe dont la caractéristique majeure est l'incertitude qu'il faut admettre comme un élément permanent de la réalité. La complexité confronte une entreprise à un environnement composé d'interactions si nombreuses et changeantes qu'il lui est impossible d'en maitriser tous les détails, et d'en prévoir l'ensemble des réactions, comportements et émergences.

La performance tient alors en l'aptitude à imaginer, concevoir, à mettre en œuvre et à réadapter en permanence des produits, des services, des process, des business modèles mais également des comportements collectifs pertinents en cohérence avec la vocation, la finalité et les intentions de l'entreprise. Mais se comporter en acteur actif d'une construction qui n'est pas écrite d'avance dépend pour une part non négligeable d'un levier perçu à priori comme difficilement maitrisable: la culture d'entreprise.

2. Pas sans la culture

Poser la nécessité d'innover durablement avec pour levier fort le système d'information que la digitalisation de l'écosystème de l'entreprise et son corollaire l'expérience client rendent de plus en plus indispensable, n'est pas suffisant. Reste encore à identifier et à mettre en œuvre les fondamentaux culturels qui feront la singularité de l'entreprise sur son marché et assureront sa pérennité.

Faire émerger une culture d'entreprise en cohérence avec sa stratégie, consiste à déployer un processus rationnel et industrialisé ayant pour cible le corps social de l'entreprise. La méthode innovante est issue de l'anthropologie d'entreprise, discipline développée par Marc Lebailly (Lebailly, 2007), dotée d'outils de mesures quantitatives par Laurent Benarbia (Benarbia, 2011) et industrialisée par les équipes de Culturibles sur les bases de leurs retours d'expériences de quinze années dans des grands comptes français et internationaux.

La démarche, en référence aux travaux de Lévi-Strauss, part du principe que la culture est l'infrastructure de tout collectif humain qui coopère et produit. Elle génère un sentiment d'appartenance et donc les éléments de la cohésion sociale.

L'entreprise, comme toute organisation humaine, est d'abord structurée par sa culture. La cohésion sociale, résultat d'une culture d'entreprise forte et adaptative, est un facteur clé de succès et de performance. Un corps social cohésif est naturellement capable des comportements adéquates pour faire face aux évolutions (économiques, sociales, projets, innovation …..), si stratégie d'entreprise et culture d'entreprise sont en cohérence.

Le mécanisme à l'œuvre est celui de l'appartenance. Les êtres humains ont un besoin fondamental d'être ensemble et d'appartenir à une tribu, mécanisme de survie issu de la préhistoire mais encore actif aujourd'hui. Nous adaptons nos comportements pour être dans et avec notre tribu en respectant son système d'interdits et d'obligations.

Dans une entreprise le corps social construit de manière inconsciente et au fil des événements un système d'obligations et d'interdits, c'est dire un référentiel implicite de ce qui est interdit et obligatoire en terme de comportement au sein de l'organisation. Toute transformation, toute stratégie, toute tentative d'innovation métier, organisationnelle ou technique qui serait incompatible ou en opposition avec le système d'interdits et d'obligations ne pourra aboutir tant elle générera des résistances parce qu'il y a remise en cause de l'appartenance. L'exemple

malheureusement le plus classique étant celui de la direction générale qui décide que l'innovation sera le nouveau crédo pour tous, sans avoir conscience que la prise de risque et le droit à l'erreur sont des interdits majeurs de l'entreprise : échec garanti quelques soient les moyens ou le ton employés, et fort risque d'altérer la cohésion sociale.

La mise en lumière du système d'interdits et d'obligations par des méthodes qualitatives et corroborées par des mesures quantitatives (Benarbia, 2011) permet d'estimer ce qu'il est possible de déployer ou pas en terme de transformation, de stratégie, de conduite du changement, d'innovation, de comportement. Une connaissance bien utile au regard des sommes englouties par les 70% d'échecs des projets de transformation d'entreprise ou de ses business.

Pour appartenir, nous devons aussi être légitime et à la bonne place dans notre organisation. Georges Dumézil (Dumézil, 1968) a montré que toutes les organisations humaines "indo-européennes" pour fonctionner correctement ont une organisation symbolique qui répartie en trois ordres (les producteurs, les clercs, les guerriers) les rôles de chacun au sein du groupe. La bonne place de chacun au sein du groupe garantie sa reconnaissance par celui-ci et en renforce la cohésion.

En entreprise, les producteurs sont ceux qui produisent les biens ou les services. Les clercs sont pour certains en charge des fonctions régaliennes de l'entreprise (RH, Finances, Audit, Services généraux…) et pour d'autres en charge de l'innovation. Les guerriers ont en charge le marketing et les relations "commerciales" avec les clients, le réseau, les fournisseurs. Le respect de ces trois ordres et de leurs justes poids respectifs sont nécessaires au bon fonctionnement de l'organisation, en renforce la cohésion sociale, chacun étant légitime et à sa bonne place.

Négliger la tripartition fonctionnelle symbolique peut avoir des conséquences néfastes sur une organisation. L'exemple caricatural mais beaucoup trop fréquent dans le monde de l'IT est celui de la direction des systèmes d'information qui met au point (les clercs) un magnifique catalogue de services (les producteurs) mais que personne ne va défendre et vendre auprès des directions métiers. L'absence de commerciaux (les guerriers) est alors à corréler avec l'augmentation d'achats de services IT par les métiers à l'extérieur de l'entreprise ce qui finit par provoquer la nomination parmi les membres la DSI de clercs ou de producteurs aux postes de "vendeurs" (guerriers sans légitimité, pas dans le bon rôle). Au final, des achats toujours croissants de services IT hors la DSI qui perd au passage de sa légitimité, et une cohésion mise à mal.

Le système d'interdits et d'obligations de l'entreprise, sa tripartition fonctionnelle symbolique, son profil typologique que caractérisent son degré d'ouverture et sa réponse en terme de gouvernance d'organisation, sa vocation qui est sa manière d'envisager son métier, son mythe fondateur qui traduit sa conception du monde, sont ses fondamentaux culturels (Lebailly,2007) c'est-à-dire les comportements internes et externes de l'entreprise face aux évènements quotidiens ou exceptionnels auxquels elle doit faire face.

La culture est pour une entreprise ce que la personnalité est pour un individu. Elle définit les règles de l'appartenance et le fonctionnement de l'organisation, elle conditionne les comportements et mobilise les énergies et les focalise sur quelques objectifs majeurs, elle est une considération essentielle dans tout projet de changement et permet à l'entreprise de résoudre ses problèmes d'adaptation.

3. Conclusion

La culture d'entreprise est un actif stratégique de l'entreprise. Il est identifiable, mesurable qualitativement et quantitativement et donc gouvernable comme tout autre actif. Les organisations humaines étant d'abord structurées par la culture vouloir déployer des stratégies et des processus, d'innovation ou autres, sans tenir compte des fondamentaux culturels est une démarche vouée à un échec certain. A contrario favoriser les bons comportements collectifs et individuels en interdire d'autres facilitera le déploiement des bonnes pratiques professionnelles même si le contexte est incertain ou difficile, l'adaptation étant alors naturelle parce que c'est la cohésion sociale et l'appartenance qui sont à l'œuvre.

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